

1 **Supplement**

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3 **Maternal weight retention**

4 Following multiple imputation, the estimated mean difference in 12 month weight retention
5 between groups is -0.4 kg (-1.7, 0.9), $p = 0.573$ in unadjusted analysis and -0.4 kg (-1.9, 1.1), $p = 0.604$
6 in adjusted analysis. The estimated effect of GWG on 12 month weight retention is 0.3 kg (0.1, 0.4),
7 $p < 0.001$ in both unadjusted and adjusted analyses. The results for the association between dietary
8 intake during pregnancy and weight retention at 12 months post-partum are given in Table 1.

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10 **Infant outcomes**

11 The estimated between group differences in infant weight at each follow-up time point, following
12 multiple imputation, are given in Table 2. The effect of a 1 kg increase in GWG on the weight of
13 infants at 12 months is estimated as 30 g (0, 61), $p = 0.052$ in unadjusted analysis, and 21 g (-8, 50),
14 $p = 0.150$ in adjusted analysis. The results for the association between dietary intake during
15 pregnancy and weight of infants at 12 months are given in Table 3.

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17 Table 1. The association between reported dietary intake during pregnancy and weight retention at
 18 12 months post-partum (following multiple imputation)

Dietary component	Unadjusted effect size (95% CI)	P ^a	Adjusted effect size (95% CI)	P ^b
Energy intake (100kcal/day)				
16 th -18 th week	0.10 (-0.06, 0.26)	0.233	0.08 (-0.08, 0.24)	0.330
36 th -38 th week	0.07 (-0.10, 0.25)	0.405	0.05 (-0.12, 0.23)	0.545
Change	-0.03 (-0.21, 0.14)	0.696	-0.03 (-0.21, 0.14)	0.720
Fat (g/day)				
16 th -18 th week	0.02 (-0.02, 0.05)	0.336	0.01 (-0.02, 0.04)	0.478
36 th -38 th week	0.01 (-0.02, 0.04)	0.564	0.01 (-0.02, 0.04)	0.676
Change	-0.01 (-0.04, 0.03)	0.701	-0.00 (-0.04, 0.03)	0.793
Carbohydrates (g/day)				
16 th -18 th week	0.01 (-0.01, 0.02)	0.316	0.01 (-0.01, 0.02)	0.382
36 th -38 th week	0.00 (-0.01, 0.02)	0.633	0.00 (-0.01, 0.01)	0.818
Change	-0.00 (-0.02, 0.01)	0.661	-0.00 (-0.02, 0.01)	0.577
Protein (g/day)				
16 th -18 th week	0.03 (-0.01, 0.07)	0.141	0.03 (-0.01, 0.06)	0.206
36 th -38 th week	0.02 (-0.02, 0.06)	0.306	0.02 (-0.02, 0.06)	0.295
Change	-0.01 (-0.05, 0.04)	0.817	-0.00 (-0.04, 0.04)	0.967
Fibre (g/day)				
16 th -18 th week	0.01 (-0.09, 0.10)	0.861	-0.02 (-0.12, 0.08)	0.705
36 th -38 th week	-0.00 (-0.10, 0.10)	0.949	-0.02 (-0.12, 0.08)	0.654
Change	-0.01 (-0.11, 0.10)	0.882	-0.01 (-0.12, 0.10)	0.907

19 Effect sizes from regression models as estimated marginal mean difference (95% CI)

20 a) unadjusted model

21 b) linear mixed model adjusted for practice (random factor), maternal age, pre-pregnancy BMI, time of follow-
 22 up and group

23 Table 2. Infant weight at follow-up visits in each group and the estimated mean weight differences
 24 between the groups (following multiple imputation)

Time point	Unadjusted effect size (95% CI)	P^{a)}	Adjusted effect size (95%CI)	P^{b)}
U2	8 (-101, 116)	0.892	25 (-15, 64)	0.220
U3	-22 (-172, 129)	0.777	-18 (-115, 78)	0.707
U4	-176 (-394, 43)	0.114	-166 (-381, 49)	0.130
U5	-250 (-514,14)	0.063	-203 (-446, 40)	0.101
U6	-368 (-634, -103)	0.007	-259 (-516,-2)	0.048

25 Effect sizes from regression models as estimated marginal mean difference (95% CI)

26 a) unadjusted model

27 b) linear mixed model adjusted for practice (random factor), maternal age and pre-pregnancy BMI, infant age

28 at follow-up and birth weight

29 Table 3. The association between reported dietary intake during pregnancy and infant weight at 12
 30 months (following multiple imputation)

Dietary component	Unadjusted effect size (95% CI)	P ^a	Adjusted effect size (95% CI)	P ^b
Energy intake (100kcal/day)				
16 th -18 th week	-18 (-51, 15)	0.278	-10 (-41, 21)	0.524
36 th -38 th week	1 (-41, 42)	0.977	6 (-31, 43)	0.756
Change	19 (-20, 58)	0.342	15 (-20, 51)	0.384
Fat (g/day)				
16 th -18 th week	-3 (-10, 4)	0.355	-2 (-8, 4)	0.559
36 th -38 th week	0 (-7, 8)	0.947	1 (-6, 7)	0.825
Change	3 (-4, 11)	0.385	3 (-4, 9)	0.466
Carbohydrates (g/day)				
16 th -18 th week	-1 (-4, 1)	0.300	-1 (-3, 2)	0.527
36 th -38 th week	0 (-3, 3)	0.990	0 (-2, 3)	0.746
Change	1 (-1, 4)	0.358	1 (-1, 3)	0.356
Protein (g/day)				
16 th -18 th week	-1 (-10, 7)	0.777	0 (-7, 8)	0.905
36 th -38 th week	1 (-9, 12)	0.807	1 (-8, 11)	0.775
Change	2 (-8, 12)	0.670	1 (-8, 10)	0.863
Fibre (g/day)				
16 th -18 th week	-9 (-29, 12)	0.403	1 (-18, 20)	0.887
36 th -38 th week	-3 (-25, 19)	0.764	-1 (-21, 19)	0.938
Change	4 (-19, 26)	0.755	-2 (-23, 19)	0.857

31 Effect sizes from regression models as estimated marginal mean difference (95% CI)

32 a) unadjusted model

33 b) linear mixed model adjusted for practice (random factor), maternal age and pre-pregnancy BMI, infant age

34 at follow-up, birth weight and group

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